

Ejercicio 13 seccion 1.8 grossman 2 ed.

BY DIEGO ALVAREZ

Detemnar la inversa de la siguiente matriz

$$A = \begin{pmatrix} 1 & 1 & 1 & 1 \\ 1 & 2 & -1 & 2 \\ 1 & -1 & 2 & 1 \\ 1 & 3 & 3 & 2 \end{pmatrix}$$

```
-----  
| Sage Version 3.4, Release Date: 2009-03-11 |  
| Type notebook() for the GUI, and license() for information. |  
-----
```

Sage Version 3.4, Release Date: 2009-03-11

```
sage] A=matrix(QQ,[[1,1,1,1],[1,2,-1,2],[1,-1,2,1],[1,3,3,2]])  
sage] A
```

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 1 & 2 & -1 & 2 \\ 1 & -1 & 2 & 1 \\ 1 & 3 & 3 & 2 \end{pmatrix}$$

```
sage] A.inverse()
```

$$\begin{pmatrix} \frac{7}{3} & -\frac{1}{3} & -\frac{1}{3} & -\frac{2}{3} \\ \frac{4}{9} & -\frac{1}{9} & -\frac{4}{9} & \frac{1}{9} \\ -\frac{1}{9} & -\frac{2}{9} & \frac{1}{9} & \frac{2}{9} \\ -\frac{5}{3} & \frac{2}{3} & \frac{2}{3} & \frac{1}{3} \end{pmatrix}$$

```
sage]
```

quedo determinada la matriz a y su inversa su multiplicacion nso dara luego la matriz identidad